REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-20 are now present in this application. Claims 1, 11 and 18 are independent, and have been amended. No new matter is involved. Reconsideration of this application, as amended, is respectfully requested.

I. Status of Drawing Amendment

Applicant filed the amended drawings in the Amendment filed April 22, 2004. The Office Action does not indicate whether those drawings were accepted. Applicant respectfully requests approval of the proposed drawing amendment filed on April 22, 2004.

II. Rejections under 35 U.S.C. §103

Claims 1-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the allegedly Admitted Conventional Art of Figure 1 in view of U.S. Patent 5,862,412. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

At the outset, Applicant respectfully submits that it is fundamentally improper to base a rejection on allegedly admitted conventional art. No basis for

doing so is cited in the Office Action and Applicant is unaware of any such basis in patent law or practice.

On page 13, the Office Action uses Merriam Webster's Collegiate Dictionary, 10th edition, to define the term "conventional" and concludes from that definition that "the admitted conventional art or device is a well-known, commonplace device or art."

Even if that definition were correct, the Office Action has not met its burden of providing a *prima facie* showing that a well known, commonplace device or art is necessarily "prior art" to Applicant. The Office Action has not, for example, established by any objective factual evidence that something that is well known and commonplace is "prior art" to Applicant under 35 U.S.C. § 102, or that something that is well known and commonplace is clearly, unequivocally and unmistakably admitted prior art to Applicant.

The Office has not, for example, provided any objective factual evidence that the admittedly conventional art was not commonly assigned to the same assignee as is Applicant's claimed invention at the time of Applicant's claimed invention.

Moreover, Applicant respectfully submits that no admission has been made by Applicant that Figure 1 qualifies as statutory prior art usable in a rejection of the claims of the present application. Instead, Applicant has labeled Figure 1 as "Conventional Art" to distinguish Applicant's invention from that

which is not Applicant's invention. If a drawing figure illustrates only material which is known to be statutory prior art to the invention, then the use of the phrase --Prior Art-- in the drawing figure would be proper. However, if it is not clear whether such material is statutory prior art, then the use of the phrase --Prior Art-- in the drawing figures would not be proper, and a label such as "Conventional Art" would be more appropriate to distinguish Applicant's invention from that which is not Applicant's invention.

In rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore

Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

The first requirement is a showing of a suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination (see, for example, ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

According to the Office Action, the alleged reason to modify the conventional art of Fig. 1 "by providing the character and picture data compression/decompression apparatus of Sugiyama" is "so that the compressed bit map data takes less memory to store, thereby making the system less costly and a more compact system over all."

However, this alleged motivation is nothing more than a broad conclusory statement about compression and decompression of bit map data which did not motivate the developers of the conventional art to modify the conventional art and does not constitute "evidence" of proper motivation to make the alleged modification of the conventional art-see Dembcizak, cited above, in this regard.

The Office Action does not make out a prima facie case of obviousness of the claimed invention at least for this reason.

Although the Office Action mentions this argument on page 12, it fails to address or rebut the merits of this argument in contravention of the explicit requirement to do so as set forth in MPEP §707.07(f). This failure to address

this argument also denies Applicant's fundamental substantive and due process rights under the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000).

Moreover, one of ordinary skill in the art would have no incentive to modify the conventional art, which is directed to an image display device in a digital TV that receives TV broadcasts and provides various resolutions of broadcast text data by storing a number, e.g., four, of different text resolutions and then displaying a predetermined stored text resolution in view of Sugiyama because Sugiyama is not concerned with digital TVs that receive TV broadcasts at all, or digital TVs that receive TV broadcasts and convert text data into the display format according to the variation of resolution.

Rather, Sugiyama is directed to "development of a portable terminal equipment wherein character data and/or picture data of binary or multiple values of characters, line drawings, photographs and so forth recorded in a book, a newspaper, a magazine or the like are recorded onto an electronic, optical or magnetic recording medium." See col. 1, lines 15-21. Sugiyama is concerned with "document data", and is not concerned with digital TVs that receive TV broadcasts.

The Office Action fails to explain why one of ordinary skill in the art would look to Sugiyama to modify the conventional TV display for TV

broadcasts. The only reason one might do this is based on Applicant's disclosure, but that is impermissible hindsight reconstruction of the claimed invention based solely on Applicant's disclosure.

Application No.: 09/922,863

In response to this argument, the Office Action asserts that the claims do not recite a bit map converter for a digital signal in a digital TV. Actually, claim 1 recites an image display device in a digital TV having a display including a data processing part for executing bit map conversion; and independent claims 11 and 18 recite a data processing device in a digital TV having a display including a bit map converter, so Applicant's arguments differentiating Sugiyama from the claimed device are proper.

Moreover, Applicants have amended independent claim 1 to recite a combination of features including "a data processing part for executing bit map conversion, compression, restoration and format-conversion for character data to be displayed on the digital TV display;" and have amended claims 11 and 18 to recite a combination of features including "a bit map converter for determining whether text data to be displayed on the digital TV display is bit map data and converting the text data into bit map data, based upon a determined result." Thus, the argument that Applicant is not arguing what is being claimed is without merit.

Furthermore, there is no indication of record that the conventional art has a problem to be solved. So, one of ordinary skill in the art would not be

looking around for a solution to a problem of which the skilled worker is not aware.

The only indication of the problem is by Applicant in his disclosure, and his disclosure cannot be used against him as it is impermissible hindsight. In this regard, it should be noted that Applicant does not state that the conventional art recognized that a problem existed that needed to be solved.

The Office Action addresses these arguments by referring to page 7 of Applicant's specification, which identifies a problem with a conventional image display device that Applicant solves. This is a classic example of impermissibly using Applicant's own disclosure against him. Applicant is the only one who identifies the problem with the conventional art. Fig. 1, which the Office Action impermissibly tries to use against Applicant as conventional art, does not identify the existence of such a problem.

It is well settled that there must be a teaching or suggestion within the prior art, within the nature of the problem to be solved, or within the general knowledge of a person of ordinary skill in the field of the invention, to look to particular sources, to select particular elements, and to combine them as combined by the inventor. See Ruiz v. A.B. Chance Co., 234 F.3d 654, 665, 57 USPQ2d 1161, 1167(Fed. Cir. 2000); ATD Corp., 159 F.3d at 546, 48 USPQ2d at 1329; Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., Inc., 21 F.3d 1068, 1072, 30 USPQ2d 1377, 1379 (Fed. Cir. 1994) ("When the

Reply to December 13, 2004 Office Action

patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination.").

The Office Action is not looking to the prior art to provide a disclosure of the nature of the problem to be solved, but is impermissibly looking to Applicant's own disclosure of the problem to be solved. This is completely improper hindsight reconstruction of Applicant's claimed invention based solely on Applicant's disclosure.

Moreover, there is certainly no disclosure in evidence of a problem with TV displays for broadcast TVs that is addressed by Sugiyama, which is directed to display terminals for character and/or picture data that are recorded onto an electronic, optical or magnetic recording medium.

The Office Action addresses this argument by stating that "applicants may not attack references individually when the rejection was made in combination of two or more references as in this case." Applicant respectfully disagrees with this conclusion, which, if followed to its logical conclusion would mean that an Applicant can never attack the motivation for combining the references in any manner, including addressing the disclosure of each individual reference used in the reference combination. Such a position is untenable and ignores the requirement that the Office Action has to make out a *prima facie* case of proper motivation to combine the references used in

combination in making a rejection by providing objective factual evidence to support the alleged motivation for combining the combined references. See, in this regard, In re Lee, cited below.

Accordingly, the rejection fails to make out a *prima facie* case of obviousness of the claimed invention.

In the alternative, regarding claim 5, which depends from claim 1, the Office Action provides no evidence of the speculation in which it engages. Neither the conventional art nor Sugiyama discloses or suggests converting text data to bit map format if it is determined not to be in bit map format. Logically, nothing comes from nothing, so that because neither reference discloses or suggests the claimed feature, logically, neither or both references can render obvious this claimed feature, which is not found in either one. Moreover, a factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re. Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). As neither applied reference even suggests converting text to bit map form if it is determined not to be in bit map form, the motivation for modifying one of the two references to include that feature must be based on speculation and/or impermissible hindsight.

The Office Action fails to address or rebut the merits of this argument in contravention of the explicit requirement to do so as set forth in MPEP

§707.07(f). This failure to address this argument also denies Applicant's fundamental substantive and due process rights under the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000).

Similar comments apply to the rejection of claim 6, which recites a feature not found in either applied reference.

In the alternative, with respect to claim 7, the question is not whether run-length encoding is well known in the art, but whether it would be obvious to apply run-length encoding to the applied reference combination. The Office Action alleges that it would be obvious to do so "so that the DC-balancing or DC wondering of the signal would greatly improve."

Unfortunately, the Office Action fails to present any objective evidence in support of this conclusion – evidence that is required to be presented. See, in this regard, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). Accordingly, this rejection of claim 7 is fatally defective and must be withdrawn.

Similar comments apply to the rejection of claim 9 with respect to which the Office Action fails to present any objective evidence in support of its conclusion that it would be obvious to further modify the system of conventional art and Sugiyama by providing a consecutive bit map conversion process so that conversion from text or document data would be less prone to error and as a result run more smoothly. This is another rejection based on improper speculation and on references that simply fail to disclose or suggest the features recited in claim 9.

The Office Action fails to address or rebut the merits of these arguments in contravention of the explicit requirement to do so as set forth in MPEP §707.07(f). This failure to address these arguments also denies Applicant's fundamental substantive and due process rights under the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000).

For the aforementioned reasons, Applicant respectfully submits that the office Action fails to make out a *prima facie* case of obviousness of the claimed invention recited in claims 1-9.

Reconsideration and withdrawal of the rejection of claims 1-9 under 35 USC §103(a) as unpatentable over the conventional art of Fig. 1 in view of Sugiyama is respectfully requested.

Claims 11-16, 18 and 19 stand rejected under 36 U.S.C. § 103(a) in view of Sugiyama in view of U.S. Patent 5,969,770 to Horton. This rejection is respectfully traversed.

In the first place, Sugiyama does not disclose a "digital TV having a display" as recited in independent claims 11 and 18. All that Sugiyama

discloses is "a portable terminal" (col. 1, lines 15-20). Not once does Sugiyama disclose a digital TV, either expressly or inherently (which means it must necessarily be disclosed).

In the second place, as clearly, unmistakably and unequivocally admitted in the Office Action, Sugiyama does not disclose a format converter for converting the format of the decompressed bit map data to correspond with display resolution.

In the third place, Horton does not disclose a format converter for converting the format of the decompressed bit map data to correspond with display resolution, either. Instead, Horton merely discloses conversion between unsampled graphics information made up of a complete set of luminance and chrominance components (e.g., 4:4:4) and subsampled graphics information made up of less than complete sets of luminance and chrominance components (e.g., 4:2:2 and/or 4:2:0), which has nothing to do with display resolution.

So, even if these two references were combined, as alleged, they would not result in the claimed invention.

Moreover, the Office Action fails to explain why one of ordinary skill in the art would be motivated to use Horton's digital satellite television system using packet streams which does not address changing display resolution to modify Sugiyama, which also does not disclose or suggest changing display resolution, and is directed to development of portable terminal equipment not disclosed as

Reply to December 13, 2004 Office Action

dealing with packet streams to achieve a feature that neither reference discloses or suggests, namely changing display resolution for text data.

In response to this argument, the Office Action states that Horton discloses animated "on screen" display provisions for an MPEG video signal processing system, and teaches a bit-mapped OSD format converter, referring to Figs. 2 and 3, which converts YUV 4:4:4 data into YUV 4:2:2 format to conform to the desired display resolution. The Office Action concludes that it would be obvious to modify Sugiyama by providing Horton's bit format converter "in order for the data display section 29 transmit the data corresponding to a desired display resolution or format, so that the image is displayed properly conforming to the desired resolution."

Applicant respectfully disagrees. As pointed out above, Horton merely discloses conversion between unsampled graphics information made up of a complete set of luminance and chrominance components (e.g., 4:4:4) and subsampled graphics information made up of less than complete sets of luminance and chrominance components (e.g., 4:2:2 and/or 4:2:0), which has nothing to do with display resolution. The Office Action's reply completely fails to address this argument, or otherwise explain what conversion of luminance and chrominance components has to do with the claimed text display resolution.

With respect to claims 13, 14, 15 and 16, Applicant respectfully submits that these claims are also not obvious at least for the reasons stated above

regarding claim 11. Additionally, these claims are not obvious at least for reasons similar to those presented above regarding the rejections of claims 5, 6, 7 and 9.

With respect to claim 18, please see the above remarks regarding the traversal of the rejection of claim 11. Those remarks apply equally to the rejection of claim 19.

With respect to claim 19, please see the above remarks regarding the traversal of the rejection of claim 16 (which refers to the arguments presented in the traversal of the rejection of claim 9).

Accordingly, Applicant respectfully submits that the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention recited in claims 11-16, 18 and 19.

Reconsideration and withdrawal of the rejection of claims 11-16, 18 and 19 under 37 U.S.C. § 103(a) as unpatentable over Sugiyama in view of Horton is respectfully requested.

Claims 10, 17 and 20: Although there is no formally stated rejection of record of claims 10, 17 and 20, which were indicated as containing allowable subject matter in the previous Office Action, the outstanding Office Action Summary Form (Pto-326) states that claims 1-20 are rejected, and, on pages 11

and 12, the outstanding Office Action appears to be rejecting claims 10, 17 and 20. Applicant respectfully traverses this rejection.

Application No.: 09/922,863

The Office Action takes official notice that format converters are well known for adjusting the resolution of an image signal in both horizontal and vertical positions and concludes that it would be obvious to modify the conventional art of Sugiyama by providing a format converter.

In the first place, Applicant requests that objective factual evidence be provided to support the aforementioned official notice, per the aforecited "In re Lee" decision.

In the second place, Applicant respectfully submits that the official notice contains no disclosure of what is claimed, i.e., a combination of features including wherein the converter adjusts the resolution by integrating real numbers times to either a horizontal or a vertical direction of the decompressed bit map data, so even if it were obvious to apply the official notice teaching (which has not been demonstrated on a *prima facie* basis), the resulting modification of Sugiyama or the conventional art would not result in the claimed invention.

In the third place, the base reference combination used in rejecting claim 1, from which claim 10 depends is the combination of the conventional art **and** Sugiyama whereas this rejection is based on modification of the conventional art **or** Sugiyama. This is clearly inconsistent.

In the fourth place, the base reference combination used in rejecting claim 11, from which claim 17 depends, and in rejecting claim 18, from which claim 20 depends, is Sugimaya in view of Horton, whereas this rejection is based on modification of the conventional art or Sugiyama. This is clearly inconsistent.

Accordingly, Applicant respectfully submits that the Office Action has not made out a *prima facie* case of obviousness of the invention recited in claims 10, 17 and 20.

Reconsideration and withdrawal of this improper rejection of claims 10, 17 and 20 is respectfully requested.

III. Additional Cited References

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

IV. Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the

Application No.: 09/922,863 Matter No. 3449-0170P Reply to December 13, 2004 Office Action

outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will-expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

Application No.: 09/922,863 Matter No. 3449-0170P Reply to December 13, 2004 Office Action

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

Reg. No.: 40,953

EHC/RJW/adt/mag

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000